

AS

Notice of Allowability	Application No.	Applicant(s)	
	09/914,376	UKAI ET AL.	
	Examiner	Art Unit	
	Thomas H Parsons	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 3 December 2001.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Michael Fogarty on 10 June 2004.

The application has been amended as follows:

Page 29, line 26, "because" has been deleted;

Page 36, line 25, "tale" has been changed to --tail--;

Page 75, line 6, "burning" has been changed to --heating--; and,

lines 14-15, the text "the electric power generator being characterized in that" has been deleted.

2. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: Figure 3 will be amended to include a Prior Art legend. In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

Art Unit: 1745

JP57-212779 discloses supplying auxiliary fuel to the reformer burner according to the temperature of the outlet of the reformer.

JP11-149931 discloses supplying reformed gas to the reformer for increasing the temperature of the reformer wherein the reformer reaction is started when partial oxidation temperature is reached within the reformer.

JP11-250927 discloses controlling the supply of reformed fuel according to the temperature of the fuel cell inlet or drain separator wherein values detected by temperature sensors are indicative of the steam or water content in the reformed gas. Based on the detected value, an on-off valve is closed, and supply of reformed gas is stopped.

JP62-241803 discloses controlling the supply of methanol to a reformer burner according to a temperature of the reformer catalyst. Based on the temperature of the catalyst, methanol and/or water is fed to an evaporator and evaporated superheated vapor heat the catalyst. When the catalyst reached the reforming reaction temperature, a blend of methanol and water is the feed to the evaporator to start the reforming reaction.

JP57-212775 discloses adjusting a reformer burner adjusting valve via a controller based on the output temperature of the reformer. A raw material supply valve to the transformer and a fuel gas flow valve are adjusted via a controller based on load variation of the fuel cell.

JP57-212776 discloses controlling a fuel gas flow adjusting valve and a reformer fuel burner adjusting valve based on the load of a fuel cell. In addition, a fuel burner adjusting valve is also controlled based on the control of a pressure adjusting valve.

Art Unit: 1745

JP57-212778 disclosed detecting the pressure of a fuel gas regulating valve by a pressure measuring part, the output of which is transmitted to a controller which then regulates the opening of a material gas feed valve to the reformer.

Neither of the prior art references of record teach or suggest, alone or in combination, a pressure transfer pipe for controlling supply of fuel to a reformer burner based on pressure, or supplying raw material fuel and water to a reformed based on temperature of the gas pathway between a reformer and a shifter.

Accordingly, claims 1-15 are allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas H Parsons
Examiner
Art Unit 1745


Patrick Ryan
Supervisory Patent Examiner
Technology Center 1700